

9/17/2015

Ms. Cecilia Greene
Auxier & Associates, Inc.
9821 Cogdill Road, Suite 1

Knoxville TN 37932

Project Name: Westlake Landfill

Project #:

Workorder #: 1509045

Dear Ms. Cecilia Greene

The following report includes the data for the above referenced project for sample(s) received on 9/3/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Passive S.E. RAD130/SKC are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner
Project Manager

WORK ORDER #: 1509045

Work Order Summary

CLIENT:	Ms. Cecilia Greene Auxier & Associates, Inc. 9821 Cogdill Road, Suite 1 Knoxville, TN 37932	BILL TO:	Ms. Cecilia Greene Auxier & Associates, Inc. 9821 Cogdill Road, Suite 1 Knoxville, TN 37932
PHONE:	865-675-3669	P.O. #	
FAX:	865-675-3677	PROJECT #	Westlake Landfill
DATE RECEIVED:	09/03/2015	CONTACT:	Kelly Buettner
DATE COMPLETED:	09/17/2015		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	ENGWESA001	Passive S.E. RAD130/SKC
02A	ENGWESA005	Passive S.E. RAD130/SKC
03A	ENGWESA007	Passive S.E. RAD130/SKC
04A	ENGWESA008	Passive S.E. RAD130/SKC
05A	ENGWESA011	Passive S.E. RAD130/SKC
06A	Duplicate	Passive S.E. RAD130/SKC
07A	TRIP BLANK	Passive S.E. RAD130/SKC
08A	Lab Blank	Passive S.E. RAD130/SKC
09A	LCS	Passive S.E. RAD130/SKC
09AA	LCSD	Passive S.E. RAD130/SKC

CERTIFIED BY: 
 Technical Director

DATE: 09/17/15

LABORATORY NARRATIVE
Passive SE GC/MS
Auxier & Associates, Inc.
Workorder# 1509045

Seven Radiello 130 (Solvent) samples were received on September 03, 2015. The laboratory extracted the charcoal sorbent bed of the passive sampler using carbon disulfide. An aliquot of the extract was injected into a GC/MS for identification and quantification of volatile organic compounds (VOCs).

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the sampling rate for each VOC. If sampling rates were calculated by the lab or the manufacturer, the concentration result has been flagged as an estimated value. Results are not corrected for desorption efficiency.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The uptake rates were corrected based on average field temperatures if provided. In the absence of field temperatures, the uptake rates determined at 25 deg C were used.

To calculate ug/m³ concentrations in the Lab Blank and Trip Blank, a sampling duration of 20180 minutes was applied. The assumed temperature used for the uptake rate is listed on the data page. If the field temperatures were provided, the rate was adjusted in the same manner as the field samples.

Naphthalene was detected in the laboratory blank.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

Definition of Data Qualifying Flags

Nine qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

C - Estimated concentration due to calculated sampling rate

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Summary of Detected Compounds VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: ENGWESA001

Lab ID#: 1509045-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.075	0.56	0.42
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.29	0.18
Cyclohexane	0.10	0.092	0.15	0.14
Carbon Tetrachloride	0.10	0.074	0.44	0.33
Benzene	0.40	0.25	0.52	0.32
Heptane	0.10	0.086	0.36	0.31
Toluene	0.10	0.067	1.2	0.82
Tetrachloroethene	0.10	0.084	0.23	0.20
Ethyl Benzene	0.10	0.073	0.18	0.13
m,p-Xylene	0.10	0.071	0.52	0.37
o-Xylene	0.10	0.077	0.19	0.15

Client Sample ID: ENGWESA005

Lab ID#: 1509045-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.075	0.68	0.51
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.30	0.19
Chloroform	0.10	0.066	0.11	0.076
Cyclohexane	0.10	0.092	0.12	0.11
Carbon Tetrachloride	0.10	0.074	0.46	0.34
Benzene	0.40	0.25	0.48	0.30
Heptane	0.10	0.085	0.30	0.25
Toluene	0.10	0.067	1.2	0.82
Tetrachloroethene	0.10	0.084	0.12	0.10
Ethyl Benzene	0.10	0.073	0.19	0.14
m,p-Xylene	0.10	0.071	0.55	0.39
o-Xylene	0.10	0.076	0.20	0.15

Client Sample ID: ENGWESA007

Lab ID#: 1509045-03A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
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Summary of Detected Compounds VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: ENGWESA007

Lab ID#: 1509045-03A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.13	0.22	0.14
Hexane	0.10	0.075	0.82	0.62
Ethyl Acetate	0.40	0.25	0.71	0.45
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.32	0.20
Cyclohexane	0.10	0.092	0.16	0.14
Carbon Tetrachloride	0.10	0.074	0.46	0.34
Benzene	0.40	0.25	0.56	0.35
Heptane	0.10	0.085	0.33	0.28
Toluene	0.10	0.067	1.6	1.0
Tetrachloroethene	0.10	0.084	0.15	0.12
Ethyl Benzene	0.10	0.073	0.23	0.16
m,p-Xylene	0.10	0.071	0.66	0.46
o-Xylene	0.10	0.076	0.23	0.18

Client Sample ID: ENGWESA008

Lab ID#: 1509045-04A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.075	0.53	0.40
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.25	0.16
Carbon Tetrachloride	0.10	0.074	0.44	0.32
Benzene	0.40	0.25	0.50	0.31
Heptane	0.10	0.085	0.22	0.19
Toluene	0.10	0.067	1.0	0.67
Ethyl Benzene	0.10	0.073	0.17	0.12
m,p-Xylene	0.10	0.071	0.48	0.34
o-Xylene	0.10	0.076	0.17	0.13

Client Sample ID: ENGWESA011

Lab ID#: 1509045-05A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.075	0.62	0.47

**Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS**

Client Sample ID: ENGWESA011

Lab ID#: 1509045-05A

2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.24	0.15
Carbon Tetrachloride	0.10	0.074	0.35	0.26
Benzene	0.40	0.25	0.45	0.28
Heptane	0.10	0.086	0.20	0.17
Toluene	0.10	0.067	0.85	0.57
Ethyl Benzene	0.10	0.073	0.13	0.096
m,p-Xylene	0.10	0.071	0.37	0.26
o-Xylene	0.10	0.076	0.13	0.10

Client Sample ID: Duplicate

Lab ID#: 1509045-06A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.075	0.44	0.33
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.25	0.16
Cyclohexane	0.10	0.092	0.13	0.12
Carbon Tetrachloride	0.10	0.074	0.37	0.27
Benzene	0.40	0.25	0.43	0.27
Heptane	0.10	0.086	0.31	0.27
Toluene	0.10	0.067	1.0	0.71
Tetrachloroethene	0.10	0.084	0.20	0.17
Ethyl Benzene	0.10	0.073	0.16	0.12
m,p-Xylene	0.10	0.071	0.45	0.32
o-Xylene	0.10	0.077	0.16	0.13

Client Sample ID: TRIP BLANK

Lab ID#: 1509045-07A

No Detections Were Found.



Air Toxics

Client Sample ID: ENGWESA001

Lab ID#: 1509045-01A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c091408sim	Date of Collection:	9/2/15 9:50:00 AM
Dil. Factor:	1.00	Date of Analysis:	9/14/15 03:24 PM
		Date of Extraction:	9/14/15

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.49	Not Detected	Not Detected
Acetone	0.20	0.13	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.077	Not Detected	Not Detected
Hexane	0.10	0.075	0.56	0.42
Ethyl Acetate	0.40	0.26	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.29	0.18
Chloroform	0.10	0.066	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.080	Not Detected	Not Detected
Cyclohexane	0.10	0.092	0.15	0.14
Carbon Tetrachloride	0.10	0.074	0.44	0.33
Benzene	0.40	0.25	0.52	0.32
1,2-Dichloroethane	0.10	0.065	Not Detected	Not Detected
Heptane	0.10	0.086	0.36	0.31
Trichloroethene	0.10	0.072	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.15	Not Detected	Not Detected
Toluene	0.10	0.067	1.2	0.82
Tetrachloroethene	0.10	0.084	0.23	0.20
Chlorobenzene	0.10	0.073	Not Detected	Not Detected
Ethyl Benzene	0.10	0.073	0.18	0.13
m,p-Xylene	0.10	0.071	0.52	0.37
o-Xylene	0.10	0.077	0.19	0.15
Styrene	0.10	0.082	Not Detected	Not Detected
Propylbenzene	0.10	0.087	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.098	Not Detected	Not Detected
Naphthalene	0.10	0.20	Not Detected	Not Detected

Temperature = 77.0F , duration time = 20075 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130



Air Toxics

Client Sample ID: ENGWESA005

Lab ID#: 1509045-02A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c091409sim	Date of Collection:	9/2/15 10:15:00 AM
Dil. Factor:	1.00	Date of Analysis:	9/14/15 03:49 PM
		Date of Extraction:	9/14/15

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.48	Not Detected	Not Detected
Acetone	0.20	0.13	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.076	Not Detected	Not Detected
Hexane	0.10	0.075	0.68	0.51
Ethyl Acetate	0.40	0.25	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.30	0.19
Chloroform	0.10	0.066	0.11	0.076
1,1,1-Trichloroethane	0.10	0.080	Not Detected	Not Detected
Cyclohexane	0.10	0.092	0.12	0.11
Carbon Tetrachloride	0.10	0.074	0.46	0.34
Benzene	0.40	0.25	0.48	0.30
1,2-Dichloroethane	0.10	0.064	Not Detected	Not Detected
Heptane	0.10	0.085	0.30	0.25
Trichloroethene	0.10	0.072	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.15	Not Detected	Not Detected
Toluene	0.10	0.067	1.2	0.82
Tetrachloroethene	0.10	0.084	0.12	0.10
Chlorobenzene	0.10	0.073	Not Detected	Not Detected
Ethyl Benzene	0.10	0.073	0.19	0.14
m,p-Xylene	0.10	0.071	0.55	0.39
o-Xylene	0.10	0.076	0.20	0.15
Styrene	0.10	0.081	Not Detected	Not Detected
Propylbenzene	0.10	0.087	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.097	Not Detected	Not Detected
Naphthalene	0.10	0.20	Not Detected	Not Detected

Temperature = 77.0F , duration time = 20175 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130

Client Sample ID: ENGWESA007

Lab ID#: 1509045-03A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c091410sim	Date of Collection:	9/2/15 10:05:00 AM
Dil. Factor:	1.00	Date of Analysis:	9/14/15 04:13 PM
		Date of Extraction:	9/14/15

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.48	Not Detected	Not Detected
Acetone	0.20	0.13	0.22	0.14
Methyl tert-butyl ether	0.10	0.076	Not Detected	Not Detected
Hexane	0.10	0.075	0.82	0.62
Ethyl Acetate	0.40	0.25	0.71	0.45
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.32	0.20
Chloroform	0.10	0.066	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.080	Not Detected	Not Detected
Cyclohexane	0.10	0.092	0.16	0.14
Carbon Tetrachloride	0.10	0.074	0.46	0.34
Benzene	0.40	0.25	0.56	0.35
1,2-Dichloroethane	0.10	0.064	Not Detected	Not Detected
Heptane	0.10	0.085	0.33	0.28
Trichloroethene	0.10	0.072	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.15	Not Detected	Not Detected
Toluene	0.10	0.067	1.6	1.0
Tetrachloroethene	0.10	0.084	0.15	0.12
Chlorobenzene	0.10	0.073	Not Detected	Not Detected
Ethyl Benzene	0.10	0.073	0.23	0.16
m,p-Xylene	0.10	0.071	0.66	0.46
o-Xylene	0.10	0.076	0.23	0.18
Styrene	0.10	0.081	Not Detected	Not Detected
Propylbenzene	0.10	0.087	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.097	Not Detected	Not Detected
Naphthalene	0.10	0.20	Not Detected	Not Detected

Temperature = 77.0F , duration time = 20180 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130



Air Toxics

Client Sample ID: ENGWESA008

Lab ID#: 1509045-04A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c091411sim	Date of Collection:	9/2/15 10:26:00 AM
Dil. Factor:	1.00	Date of Analysis:	9/14/15 04:37 PM
		Date of Extraction:	9/14/15

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.49	Not Detected	Not Detected
Acetone	0.20	0.13	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.076	Not Detected	Not Detected
Hexane	0.10	0.075	0.53	0.40
Ethyl Acetate	0.40	0.25	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.25	0.16
Chloroform	0.10	0.066	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.080	Not Detected	Not Detected
Cyclohexane	0.10	0.092	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.074	0.44	0.32
Benzene	0.40	0.25	0.50	0.31
1,2-Dichloroethane	0.10	0.064	Not Detected	Not Detected
Heptane	0.10	0.085	0.22	0.19
Trichloroethene	0.10	0.072	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.15	Not Detected	Not Detected
Toluene	0.10	0.067	1.0	0.67
Tetrachloroethene	0.10	0.084	Not Detected	Not Detected
Chlorobenzene	0.10	0.073	Not Detected	Not Detected
Ethyl Benzene	0.10	0.073	0.17	0.12
m,p-Xylene	0.10	0.071	0.48	0.34
o-Xylene	0.10	0.076	0.17	0.13
Styrene	0.10	0.081	Not Detected	Not Detected
Propylbenzene	0.10	0.087	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.097	Not Detected	Not Detected
Naphthalene	0.10	0.20	Not Detected	Not Detected

Temperature = 77.0F , duration time = 20168 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130



Air Toxics

Client Sample ID: ENGWESA011

Lab ID#: 1509045-05A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c091412sim	Date of Collection:	9/2/15 10:33:00 AM
Dil. Factor:	1.00	Date of Analysis:	9/14/15 05:01 PM
		Date of Extraction:	9/14/15

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.49	Not Detected	Not Detected
Acetone	0.20	0.13	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.076	Not Detected	Not Detected
Hexane	0.10	0.075	0.62	0.47
Ethyl Acetate	0.40	0.25	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.24	0.15
Chloroform	0.10	0.066	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.080	Not Detected	Not Detected
Cyclohexane	0.10	0.092	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.074	0.35	0.26
Benzene	0.40	0.25	0.45	0.28
1,2-Dichloroethane	0.10	0.064	Not Detected	Not Detected
Heptane	0.10	0.086	0.20	0.17
Trichloroethene	0.10	0.072	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.15	Not Detected	Not Detected
Toluene	0.10	0.067	0.85	0.57
Tetrachloroethene	0.10	0.084	Not Detected	Not Detected
Chlorobenzene	0.10	0.073	Not Detected	Not Detected
Ethyl Benzene	0.10	0.073	0.13	0.096
m,p-Xylene	0.10	0.071	0.37	0.26
o-Xylene	0.10	0.076	0.13	0.10
Styrene	0.10	0.081	Not Detected	Not Detected
Propylbenzene	0.10	0.087	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.097	Not Detected	Not Detected
Naphthalene	0.10	0.20	Not Detected	Not Detected

Temperature = 77.0F , duration time = 20157 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130

Client Sample ID: Duplicate

Lab ID#: 1509045-06A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c091413sim	Date of Collection:	9/2/15 9:50:00 AM
Dil. Factor:	1.00	Date of Analysis:	9/14/15 05:26 PM
		Date of Extraction:	9/14/15

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.49	Not Detected	Not Detected
Acetone	0.20	0.13	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.077	Not Detected	Not Detected
Hexane	0.10	0.075	0.44	0.33
Ethyl Acetate	0.40	0.26	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	0.25	0.16
Chloroform	0.10	0.066	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.080	Not Detected	Not Detected
Cyclohexane	0.10	0.092	0.13	0.12
Carbon Tetrachloride	0.10	0.074	0.37	0.27
Benzene	0.40	0.25	0.43	0.27
1,2-Dichloroethane	0.10	0.065	Not Detected	Not Detected
Heptane	0.10	0.086	0.31	0.27
Trichloroethene	0.10	0.072	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.15	Not Detected	Not Detected
Toluene	0.10	0.067	1.0	0.71
Tetrachloroethene	0.10	0.084	0.20	0.17
Chlorobenzene	0.10	0.073	Not Detected	Not Detected
Ethyl Benzene	0.10	0.073	0.16	0.12
m,p-Xylene	0.10	0.071	0.45	0.32
o-Xylene	0.10	0.077	0.16	0.13
Styrene	0.10	0.082	Not Detected	Not Detected
Propylbenzene	0.10	0.087	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.098	Not Detected	Not Detected
Naphthalene	0.10	0.20	Not Detected	Not Detected

Temperature = 77.0F , duration time = 20075 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130

Client Sample ID: TRIP BLANK

Lab ID#: 1509045-07A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c091414sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/14/15 05:50 PM
		Date of Extraction:	9/14/15

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.48	Not Detected	Not Detected
Acetone	0.20	0.13	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.076	Not Detected	Not Detected
Hexane	0.10	0.075	Not Detected	Not Detected
Ethyl Acetate	0.40	0.25	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	Not Detected	Not Detected
Chloroform	0.10	0.066	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.080	Not Detected	Not Detected
Cyclohexane	0.10	0.092	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.074	Not Detected	Not Detected
Benzene	0.40	0.25	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.064	Not Detected	Not Detected
Heptane	0.10	0.085	Not Detected	Not Detected
Trichloroethene	0.10	0.072	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.15	Not Detected	Not Detected
Toluene	0.10	0.067	Not Detected	Not Detected
Tetrachloroethene	0.10	0.084	Not Detected	Not Detected
Chlorobenzene	0.10	0.073	Not Detected	Not Detected
Ethyl Benzene	0.10	0.073	Not Detected	Not Detected
m,p-Xylene	0.10	0.071	Not Detected	Not Detected
o-Xylene	0.10	0.076	Not Detected	Not Detected
Styrene	0.10	0.081	Not Detected	Not Detected
Propylbenzene	0.10	0.087	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.097	Not Detected	Not Detected
Naphthalene	0.10	0.20	Not Detected	Not Detected

Temperature = 77.0F , duration time = 20180 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130

Client Sample ID: Lab Blank

Lab ID#: 1509045-08A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c091407sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/14/15 03:00 PM
		Date of Extraction:	9/14/15

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.48	Not Detected	Not Detected
Acetone	0.20	0.13	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.076	Not Detected	Not Detected
Hexane	0.10	0.075	Not Detected	Not Detected
Ethyl Acetate	0.40	0.25	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.063	Not Detected	Not Detected
Chloroform	0.10	0.066	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.080	Not Detected	Not Detected
Cyclohexane	0.10	0.092	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.074	Not Detected	Not Detected
Benzene	0.40	0.25	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.064	Not Detected	Not Detected
Heptane	0.10	0.085	Not Detected	Not Detected
Trichloroethene	0.10	0.072	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.15	Not Detected	Not Detected
Toluene	0.10	0.067	Not Detected	Not Detected
Tetrachloroethene	0.10	0.084	Not Detected	Not Detected
Chlorobenzene	0.10	0.073	Not Detected	Not Detected
Ethyl Benzene	0.10	0.073	Not Detected	Not Detected
m,p-Xylene	0.10	0.071	Not Detected	Not Detected
o-Xylene	0.10	0.076	Not Detected	Not Detected
Styrene	0.10	0.081	Not Detected	Not Detected
Propylbenzene	0.10	0.087	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.097	Not Detected	Not Detected
Naphthalene	0.10	0.20	0.11	0.22

Temperature = 77.0F , duration time = 20180 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130

Client Sample ID: LCS

Lab ID#: 1509045-09A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c091404sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/14/15 01:44 PM
		Date of Extraction: 9/14/15

Compound	%Recovery	Method Limits
Ethanol	80	50-130
Acetone	102	70-130
Methyl tert-butyl ether	114	70-130
Hexane	132 Q	70-130
Ethyl Acetate	108	70-130
2-Butanone (Methyl Ethyl Ketone)	106	70-130
Chloroform	102	70-130
1,1,1-Trichloroethane	109	70-130
Cyclohexane	113	70-130
Carbon Tetrachloride	110	70-130
Benzene	111	70-130
1,2-Dichloroethane	103	70-130
Heptane	106	70-130
Trichloroethene	110	70-130
4-Methyl-2-pentanone	104	70-130
Toluene	100	70-130
Tetrachloroethene	108	70-130
Chlorobenzene	95	70-130
Ethyl Benzene	109	70-130
m,p-Xylene	104	70-130
o-Xylene	108	70-130
Styrene	70	20-100
Propylbenzene	95	70-130
1,4-Dichlorobenzene	85	50-110
Naphthalene	18	5-80

Q = Exceeds Quality Control limits.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1509045-09AA

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c091405sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/14/15 02:11 PM
		Date of Extraction:	9/14/15

Compound	%Recovery	Method Limits
Ethanol	73	50-130
Acetone	94	70-130
Methyl tert-butyl ether	107	70-130
Hexane	121	70-130
Ethyl Acetate	102	70-130
2-Butanone (Methyl Ethyl Ketone)	99	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	105	70-130
Cyclohexane	109	70-130
Carbon Tetrachloride	106	70-130
Benzene	107	70-130
1,2-Dichloroethane	94	70-130
Heptane	98	70-130
Trichloroethene	106	70-130
4-Methyl-2-pentanone	98	70-130
Toluene	94	70-130
Tetrachloroethene	107	70-130
Chlorobenzene	90	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	100	70-130
o-Xylene	112	70-130
Styrene	66	20-100
Propylbenzene	90	70-130
1,4-Dichlorobenzene	83	50-110
Naphthalene	14	5-80

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130